

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

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Federal Communications Commission
Office of the Secretary

In the Matter of)
)
Advanced Television Systems)
and Their Impact on the)
Existing Television Broadcast)
Service)

Review of Technical and)
Operational Requirements:)
Part 73-E, Television Broad-)
cast Stations)

Reevaluation of the UHF)
Television Channel and)
Distance Separation Require-)
ments of Part 73 of the)
Commission's Rules)

MM Docket No. 87-268

TO: The Commission

COMMENTS OF
SOUTHWESTERN BELL TELEPHONE COMPANY

Southwestern Bell Telephone Company (SWBT), by its attorneys and pursuant to Sections 1.415 and 1.430 of the Commission's Rules,¹ hereby submits Comments in response to the Tentative Decision and Further Notice of Inquiry (Further Notice), released September 1, 1988, in the above-captioned matter.

I. BACKGROUND AND INTRODUCTION

The Commission issued this Further Notice on September 1, 1988, in an attempt to gather comments to narrow further the issues related to the introduction of

¹47 C.F.R. §§ 1.415 and 1.430.

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terrestrial broadcast Advanced Television (ATV). Based on the recommendations of the Commission's Advisory Committee on ATV, the Commission also issued tentative findings that: 1) the public will benefit if existing broadcast services have the capability to provide terrestrial broadcast ATV; 2) ATV systems must be compatible with existing television receivers or be duplicated on another channel; 3) spectrum capacity for ATV will be obtained from the spectrum now allocated for broadcast television; 4) systems requiring more than 6 MHz to broadcast will not be authorized for terrestrial broadcast services; and 5) the public interest will be served by not retarding the development of ATV transport over other non-broadcast media.

SWBT supports the Commission's position which promotes the independent development of ATV transport over other non-broadcast media. SWBT supports the Commission's position, in part, because of SWBT's developmental activities concerning the transport and expanded use of High Definition Television (HDTV). HDTV is a technically advanced format of ATV which is being discussed in the industry. Permitting non-broadcast media to develop separate and apart from ATV broadcast transport will facilitate development of technically sophisticated ATV systems which require greater bandwidth and/or a different signalling format than what will likely be authorized for terrestrial broadcast. Development of such technically advanced versions of ATV, such as HDTV, is important because

HDTV has applications well beyond mass media entertainment (including such potential uses as medical imaging, computer aided design, computer aided modelling, and high quality video conferencing).²

II. THE PROPOSED 1125-LINE PRODUCTION STANDARD SHOULD BE ADOPTED BY THE INDUSTRY.

In an effort to focus future research efforts, the Commission formed the Advisory Committee in November of 1987 to make recommendations on the technical aspects of the advancement of ATV. One of the technical aspects currently under discussion at the Advisory Committee is the production standard to be adopted. As utilized herein, the term "production standard" applies to the parameters set for the original creation of video and audio material. In order to facilitate the development of ATV, industry participants in two standards setting bodies have developed a 1125-line production standard (also known as the "HDTV standard").³

²In an attempt to promote HDTV, SWBT has conducted demonstrations of the evolving HDTV technology. For one demonstration, on August 4, 1988, SWBT transmitted, via fiber-optic cable, HDTV signals of a live baseball game over a five-mile path from the St. Louis Cardinal Baseball Stadium to a theater filled with over four hundred participants from various segments of the entertainment, telecommunications, and mass media industries.

³The Advanced Television Systems Committee (ATSC) and the Society of Motion Picture and Television Engineers (SMPTE).

The standard has also been submitted for adoption by ANSI.⁴ SWBT supports the acceptance by the industry of the proposed 1125-line production standard. This standard establishes the best picture resolution that consumers can reasonably expect to receive over any media. Thus, the public will be benefitted by the industry's endorsement and acceptance of the proposed 1125-line production standard because it will help set the parameters for equipment designers and manufacturers, as well as network planners.

III. A STANDARD INTERFACE AT THE DISPLAY SHOULD BE ADOPTED.

The Commission also has requested input on the issue of equipment and media compatibility and the establishment of standards in this area. The Commission has already acted to ensure that existing NTSC receivers will be compatible with future ATV broadcast services. The Commission should also endorse the establishment of an industry developed standard interface⁵ to the HDTV display device.

An established standard interface would represent an interconnection point at which each media could compatibly interconnect. This interconnection point would

⁴The American National Standards Institute.

⁵As utilized herein, the term "standard interface" is intended by SWBT to mean an industry standard for both mechanical apparatus (plug in and receptacle) and signalling parameters.

allow independent evolution of various ATV technologies. As the technology of different transport media evolves, the public could "upgrade" to a newer media which offers higher quality if they chose. Since the standard interface would be compatible with each media, consumers would not need to replace the expensive display device in their ATV sets each time a technological advance occurs.

For the public to be provided with an optimal quality solution, the Commission should also endorse the establishment of a standard field display specification⁶ which is consistent with the quality of the 1125-line production standard. If the industry adopts interface and field display standards, technological advances (such as flat-panel displays⁷) can be easily introduced as they become economically viable for the public.

SWBT supports industry development and adoption of standard interface specifications such as those suggested by Working Parties I, IV, and V of the Advisory Committee's Planning Subcommittee. SWBT also supports industry development and adoption of a field display standard for ATV displays. The development and adoption of these two standards will ensure the public the ability to receive

⁶The term "standard field display" is intended herein to mean the resolution quality which the consumer actually sees on the television screen.

⁷The term "flat-panel" is used to mean a screen which is flat and very shallow from front to back.

picture quality comparable to the production standard to the extent it is achievable by each independent transport media system.

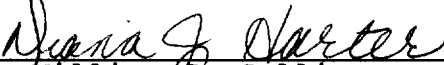
IV. CONCLUSION

The industry should adopt the proposed 1125-line production standard. SWBT supports the development of an industry standard interface specification for the display and a field display standard consistent with the production standard. The public will be best served by the development of these standards. The development of the standards should be initiated by industry participants under the auspices of the Commission's Advisory Committee.

Respectfully submitted,

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November 30, 1988

CERTIFICATE OF SERVICE

I, Belinda Grassham, hereby certify that the foregoing "Comments of Southwestern Bell Telephone Company" in CC Docket No. 87-268 have been served this 30th day of November to the Parties of Record.

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